THE GENUS HETERONYMPHA IN NEW SOUTH WALES.

By G. A. Waterhouse.

The Genus Heteronympha is typically Australian, being found chiefly along the eastern coast. All the known species have been taken in New South Wales with the exception of the Western Australian form of the commonest species of the genus. Heteronympha belongs to that portion of the Australian fauna which characterises the subregion to which Prof. Baldwin Spencer has applied the term "Bassian."* These butterflies all frequent dull damp spots, and are fond of settling on the ground among the dead leaves, so as to make it very difficult to distinguish them, as on the under side their wings resemble a withered leaf, so much so that I have often stood a few feet away from the spot where I had seen one of these butterflies settle without detecting it. They are most plentiful and most easily caught on drizzling rainy days. In this genus the males always appear on the wing before the females. As far as I am aware the life-histories of only two have been worked out; these will be found in Victorian Butterflies, Part I. The larvæ are probably all grass-feeders, sluggish in the day time, feeding only at night. This will account for the extreme difficulty in finding larve or pupe. I will now deal with the different species more in detail.

HETERONYMPHA MEROPE, Fabr.—This butterfly is at certain times one of the commonest near Sydney, and is chiefly found in gullies. The males appear on the wing in November, very few females being seen then, while later on in January the females predominate, only damaged males being on the wing. The sexes of this insect differ considerably from each other, the female being

^{*} Report of the Horn Expedition, Part i. 1896, p. 197.

much the larger. The life-history of this insect has been worked out in Victoria.* It has a very wide range, extending from Brisbane along the eastern and southern coast to Perth, W.A., and is also found in Tasmania. II. Duboulayi, Butler, recorded from Western Australia, is only a local form of this insect. The best localities near Sydney are the gullies near Rose Bay and on the North Shore; it is also common in the National Park; generally speaking it is prevalent in the county of Cumberland wherever the native bush has not been destroyed.

H. MEROPE, Fabr., var. suffusa, Skuse.†—A very remarkable suffused variety of the female of this species was caught by myself near Bowral in January, 1894. The specimen is dark brown on the upper side, with light yellow towards the base, the bluish spot of the apical angle being visible. The under side is similar to that of the typical form, only much darker. I have heard lately that a male similarly suffused has been taken in Victoria.

H. Digglesi, Miskin.—This butterfly appears on the wing at the end of the year. It was supposed that this species was confined to Queensland, but I have several records of its occurrence near Sydney. Mr. G. Masters informs me that a number were caught at Five Dock some twenty years ago. Mr. J. E. M. Russell has taken it several times in the National Park, and at the end of last year I caught it both at the National Park and at Clifton. It has been thought that this species is the male of the following; but although I believe this to be the case, I have no absolute proof, never having found the food plant.

H. MIRIFICA, Butler.—This is a very local species, being found only in very shaded gullies. It has the habit of settling on the ground, and cannot be recognised among the dead leaves, which it closely resembles. In shape it is like the female of H. merope, but differs in being black, with a white band across the anterior wing. This butterfly is on the wing from Christmas

^{*} Anderson and Spry, Victorian Butterflies (1893), pp. 60, 62. † Trans. Ent. Soc. 1895, p. xiv.

onwards, and may be taken in the creeks of the Port Hacking River, at Clifton, and the Bulli Pass. It is also recorded from Brisbane.

H. Banksh, Leach.—This insect appears on the wing in March. An early brood may appear in November, but I have not caught any then. In the present year I caught it first on the 20th February in the National Park, and later at Clifton, on 20th March, I caught several; all the specimens were males, and both days were wet, while on the days preceding 20th March (which were fine) I did not see any specimens. During Easter I caught numbers of females and only battered males. The difference between the sexes is not very great. The female has more yellow markings, and has a white spot in the apical angle of the anterior wing, which is wanting in the female. The life-history has been worked out in Victoria.* I have been informed by Mr. G. Masters that formerly this butterfly was once plentiful at Mosman's Bay, but now, owing to the progress of settlement, is rarely seen there. It may be taken plentifully at the proper time from the National Park to Wollongong. It is also recorded from Victoria and Brisbane.

H. Paradelpha, Lower. I believe this to be the first record of this species from New South Wales. In appearance the butterfly is somewhat like H. Banksii on the upperside, while on the underside it comes between H. philerope and H. cordace. It may be distinguished from H. Banksii by being lighter in colour, and by having a black spot in the apical angle of the anterior wing, which is absent from H. Banksii. The female is without the apical white spot which marks the female of H. Banksii. The female of this species differs from the male on the upperside by being very much lighter in colour, while on the underside of the posterior wing it has a pinkish suffusion. This butterfly has been known for a long time in Victoria, where, however, it is by no means common, and was described only a few years ago by Mr.

^{*} Anderson and Spry, Victorian Butterflies (1893), pp. 64, 65.

Lower, who thought it to be confined to that colony. Mr. G. Masters took a single specimen (3) in September, 1863, at Merimbula, near Bega. This specimen is now in the Macleay Museum. A few months ago I had the satisfaction of seeing examples of both sexes in the collection of Mr. A. G. Hamilton, of Mount Kembla, which he had caught near his house. On the 19th March of this year Mr. N. W. Hansard caught a female near Picton, and saw several others on the wing. I should think the best time to look for this insect would be in January and February, and it should be found along the Illawarra Range.

H. CORDACE, Hübner, H. PHILEROPE, Boisd., have both been taken on the Liverpool Plains by the late Mr. A. S. Olliff. I have not heard of their being taken nearer Sydney, but they will probably be recorded sooner or later if search is made for them. H. philerope is common near Mount Kosciusko. Both are well known Victorian species.

Appended is a note on *Xenica hobartia*, Westwood. The only specimens of the above species from New South Wales are:—One specimen caught by Mr. Olliff near Katoomba Railway Station; two specimens by Mr. Russell at the Hawkesbury, and one specimen (Q) by Mr. G. Lyell, Junr., on 5th October, 1896, at Narrabeen. This last specimen is in my collection and is exhibited to-night.